

5. NAME AND DEPTH OF USDW's: Attachment E requires a submittal of data on USDW's which may be affected by the injection operation. It is EPA policy to expect that any Underground Source of Drinking Water (USDW) overlying an injection zone has the potential for becoming being contaminated by that injection. ~~Therefore~~, the data submitted as Attachment E is inadequate for our review procedures. There are other USDW's overlying injection zones besides the Judith River (e.g., Fox Hills, Hell Creek, and the Fort Union, all of which meet the definition of a USDW). Please elaborate on your submittals for each permit, giving us the geologic name and depth to the bottom of all USDW's occurring above the injection zones. *unclear*

6. GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES: With reference to Attachment G, the geologic data submitted must be expanded upon. Please submit, in narrative form, the appropriate geologic data on the injection zone and confining zones including: lithologic description; geological name; thickness; depth and fracture pressure (and how the fracture gradient was determined). If possible, a local geological map would be very helpful.

7. OPERATING DATA: Attachment H requires that the maximum daily injection rate and pressure be submitted. You have stated the average rate and pressure, but not the maximum. Please do so for each well.

WELL-SPECIFIC DEFICIENCIES

In addition to addressing the issues mentioned above for each well, *cell 3*

please respond the the well-specific issues listed below:

VICKERS #1

1. You have submitted well data for all wells within a one-mile radius of the subject well as Attachment C. One of the those wells is the Tribal #1. The data submitted was unclear. Who owns/operates the Tribal #1? Is it an active producer at this time? If not, what is its status?
2. In Attachment H (Operating Data), you state that water analyses for the two injection source wells are attached. One of the source wells referenced is the Mason #7-16, but no analysis is included for that well. Please submit this analysis or explain why it was not included.

GOINGS #1

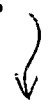
1. Since you have stated that the Goings #1 is located on Indian Lands, please indicate whether or not there is a current Bureau of Land Management permit for this well.
2. With regard to your submittal for Attachment A, the top portion of the topographic map in Exhibit I is missing. This missing portion is within the one-mile radius of the subject well. Please submit a new topographic map with the missing portion added.

CLARK #1

1. Because the Clark #1 had not commenced injection prior to September 2, 1983 (which is the date of publication for the proposed UIC regulations, and the cut-off date for "grandfathering in" aquifer exemptions for existing wells), you will need an aquifer exemption prior to receiving a permit. Aquifers with less than 10,000 mg/l total dissolved solids qualify as USDW's and must receive an exemption before EPA can issue a permit to inject (see 40 CFR Parts 144.7 and 146.4). Minimum public comment period for aquifer exemptions is 30 days. The Goings #1 and the Vickers #1, which commenced injection on 3/22/82 and 4/1/83, respectively, were granted automatic aquifer exemptions upon UIC program approval. In order to proceed with the aquifer exemption, we will need a brief description of the nearest USDW including location, water quality and water use. The aquifer exemption issue must be resolved before any permitting action can proceed.

As soon as we receive all the information listed above, we will be able to proceed with processing the permits and the aquifer exemption. Please submit the required information to the Denver Regional office as soon as possible, but no later than September 6th. If you have any questions regarding this letter, or on the status of your application, please contact Linda Clemmens or Michael Liuzzi at (303) 844-2731.

Sincerely yours,



3
Mr. Jake Eisel
Century Oil and Gas Corporation
7887 East Belleview, Suite 800
Englewood, Colorado 80111

Dear Mr. Eisel:

You are hereby requested to submit permit applications for the following wells by July 30, 1984:

<u>Field</u>	<u>Well Name</u>
NW Poplar	Goings No. 1 Vickers No. 6-15 Clark No. 1 Cox No. 1

EPA is requiring permit applications for these wells for the following reasons: 1) The agency has determined that salt water disposal (SWD) wells pose a significant threat to Underground Sources of Drinking Water (USDW's) in this area and is therefore permitting them as soon as possible and; 2) EPA has received assertions from the Bureau of Indian Affairs (BIA) of ground water contamination as a possible result of salt water disposal activities on the Fort Peck Indian Reservation. Since the East Poplar and Northwest Poplar fields are the area of greatest concern to the tribe and the BIA, we are requesting that permit applications for wells from these fields be submitted first.

Please complete one of the enclosed application forms for each well listed by July 30, 1984. Be sure that all the applications are complete and that all required attachments are included. Submit the completed applications to:

Chief, Drinking Water Branch
U.S. Environmental Protection Agency (8WM-DW)
1860 Lincoln Street
Denver, Colorado 80210

The SWD wells listed above may continue to operate under current authorization by rule until:

The effective date of a permit (activities will then be authorized by permit);

The denial of a permit (the well will no longer be authorized to inject); or

The owner or operator fails to submit the permit application within the time period specified in this notice (at which time the authorization to inject will be revoked).

I encourage you to contact either Richard Long in the EPA Denver Regional Office (Phone: (303) 844-3914) or William Engle in the EPA Montana Operations Office (Phone: (406) 449-5414) as soon as possible if you have any questions.

Sincerely yours,

John F. Wardell, Director,
Montana Operations Office

Enclosures: Permit Application Forms

Permit Application & Attachments
(P&A Approval Request)

Correspondence to EPA

Well Located: SWSE 6 029N 050E
FORT PECK

BLAIR, NW, ROOSEVELT County
C 000000 41 SWDW

MT2002-0002

TREATMENT REPORT

Date 2/11/83 Western District Sidney 13 F. Receipt 661581
Operator Century Oil & Gas
Lease Vicker Well No. 6-15
Field Wildcat Location Sec. 6-29N-50E
County Roosevelt State Montana
Stage Number 1, This Zone ☒ This Well ☒

WELL DATA: OG ☐ NG ☐ NO ☒ OO ☐ WD ☐ IW ☐ Misc. ☐ Depth TD/PB 4,175 Formation _____
Size Tubing 2 3/8 Tubing Perf. 3803 Type Packer Baker "R" Set At 3,803
Size Casing 5 1/2 Wt. 15.5 Set From 0 To 4,175 Size Liner -- Wt. --
Liner Set From -- To -- Open Hole: Size -- From -- To --
Casing Perforations: Size .4 Holes Per Foot 1 Intervals 3,960-4,060

Previous Treatment N/A Prior Production N/A

TREATMENT DATA:

Pad Used: Yes ☐ No ☒ Pad Type --
Treating Fluid Type: Oil ☐ Water ☒ Acid ☐ Misc. ☐ Foam ☐ Emulsion ☐

Treating Fluid Volume Gals. 73.5 Fluid Description Fresh Water w/gal. Packer

Total Prop Quantity -- Lbs. Prop Type: Sand ☐ Beads ☐ Special ☐ None ☐K

Prop Mesh Sizes, Types and Quantities

Hole Loaded With Formation Water Treat Via: Tubing ☒ Casing ☐ Anul ☒ Tubing & Anul. ☐

Ball Sealers: _____ In _____ Stages of _____

Types and Number of Pumps Used 1 - Acid Frac 700

Auxiliary Materials. None

FLUID PUMPED AND CAPACITIES IN BBLS.

Tubing Cap.	14.7
Casing Cap.	4.5
Annular Cap.	69.6
Open Hole Cap.	--
Fluid to Load	--
Pad Volume	--
Treating Fluid	73.5
Flush Tubing	42
Overflush	--
Total to Recover	42

Procedure Circulate 73.5 bbls Fresh Water with 5 gal. Packer Fluid
Down Annulus. Establish Injection Rate Down Tubing.

[illegible]

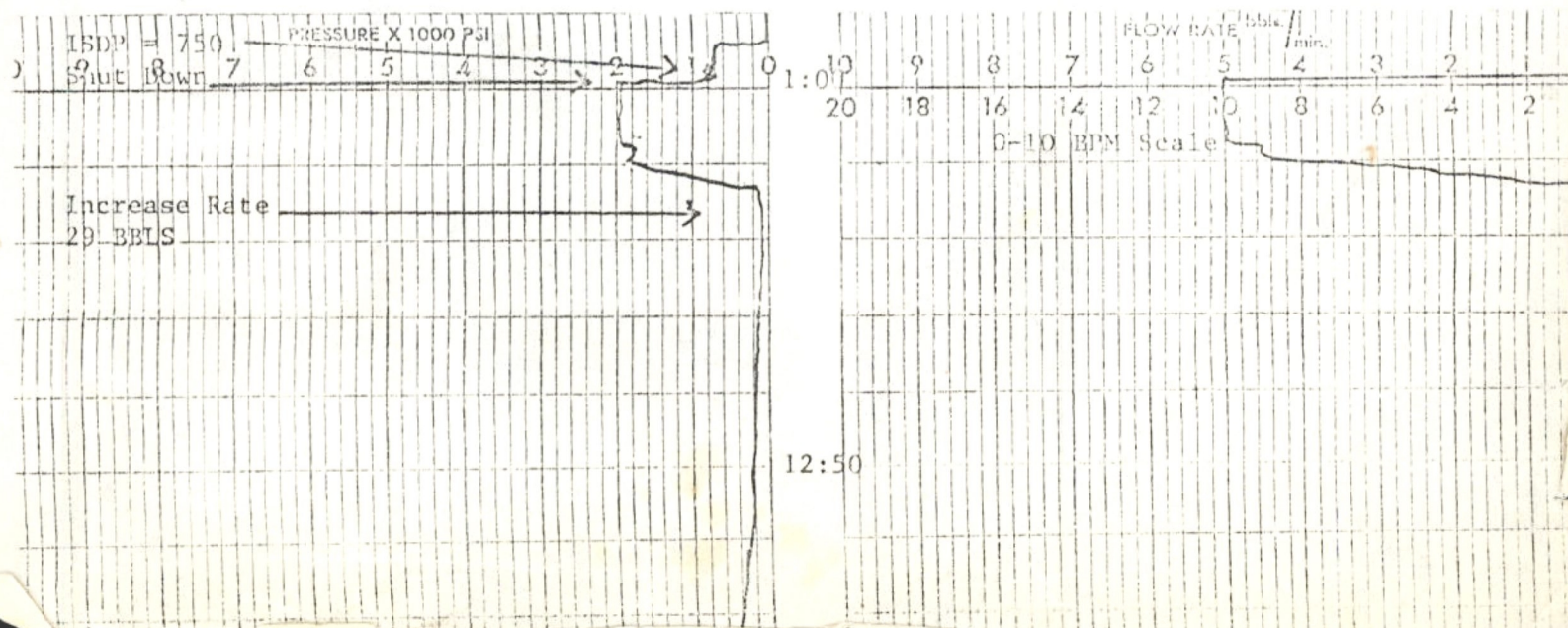
Treating Pressure: Min.	800	Max.	1950	Avg.	1200
Inj. Rate on Treating Fluid	2	Rate on Flush	2		
Avg. Inj. Rate	2	I.S.D.P.	750	Flush Dens. lb/gal	8.33
Final Shut-in Pressure	700	in	1	Minutes.	
Operator's Maximum Pressure	2000				

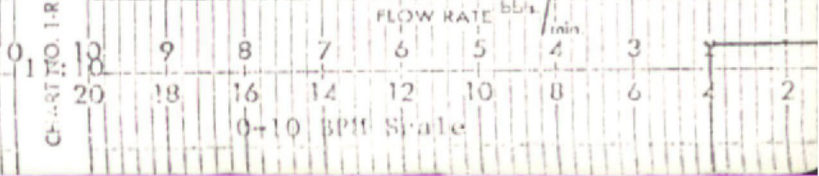
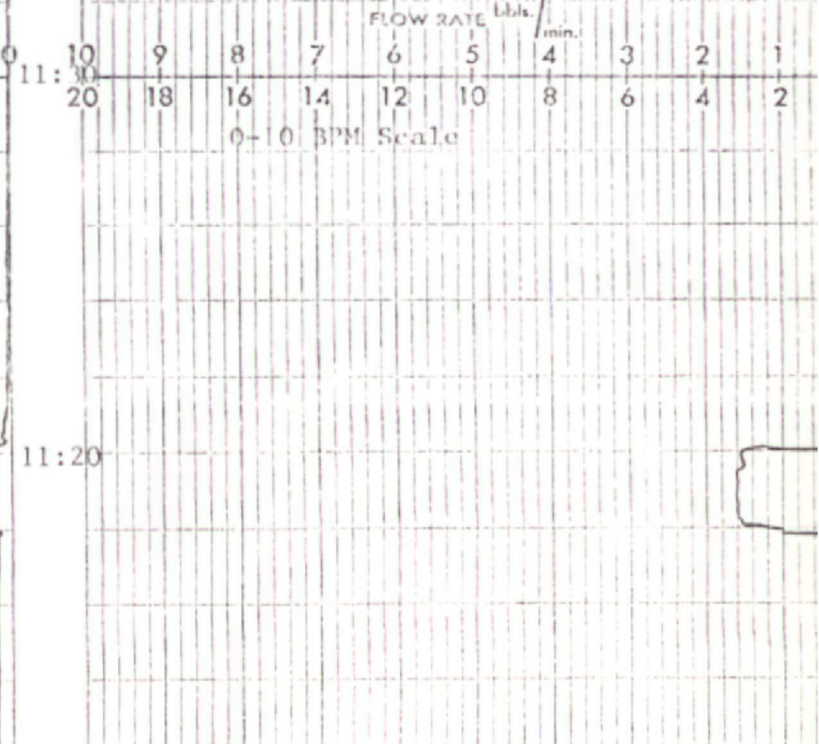
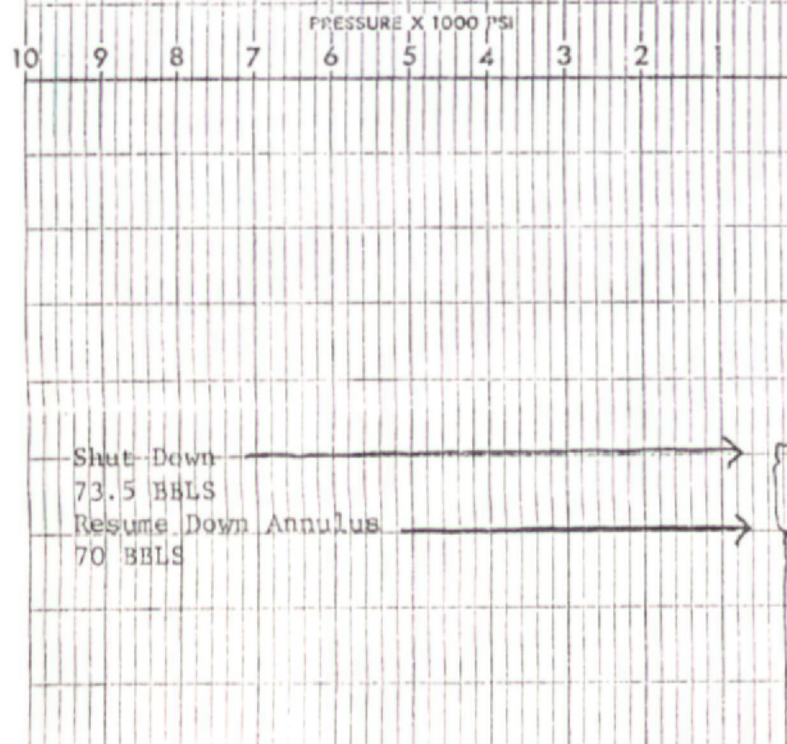
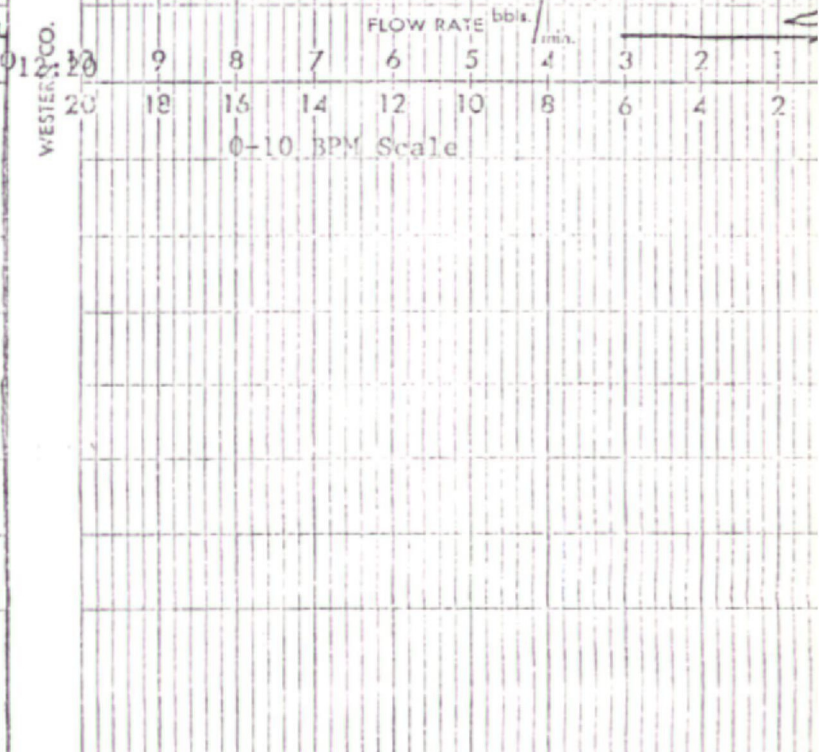
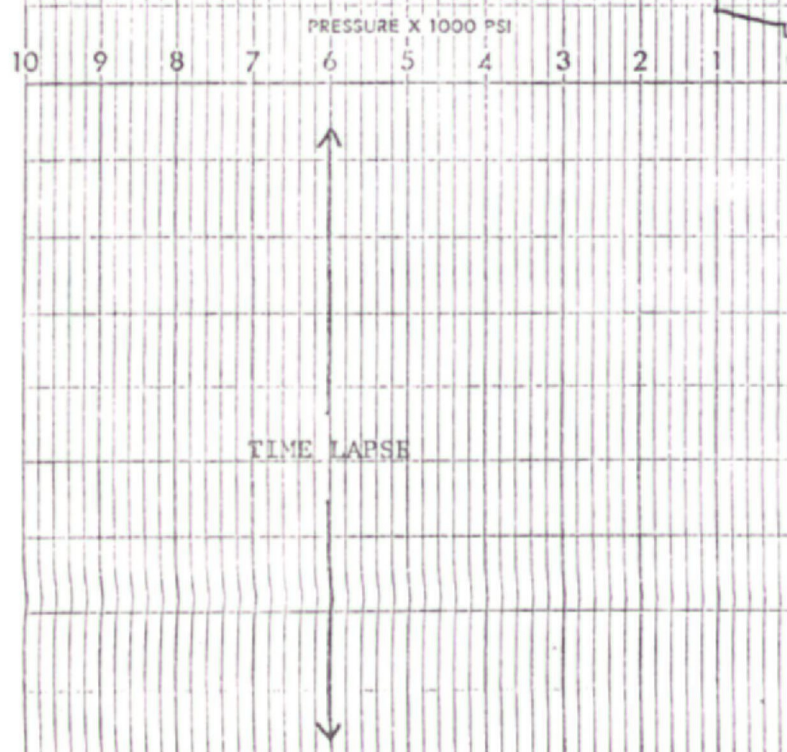
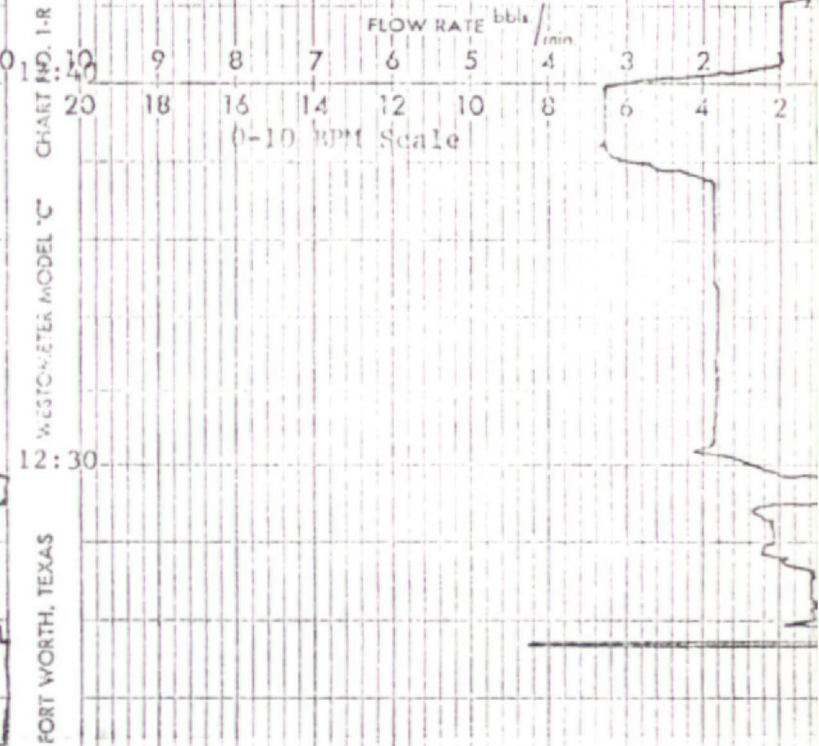
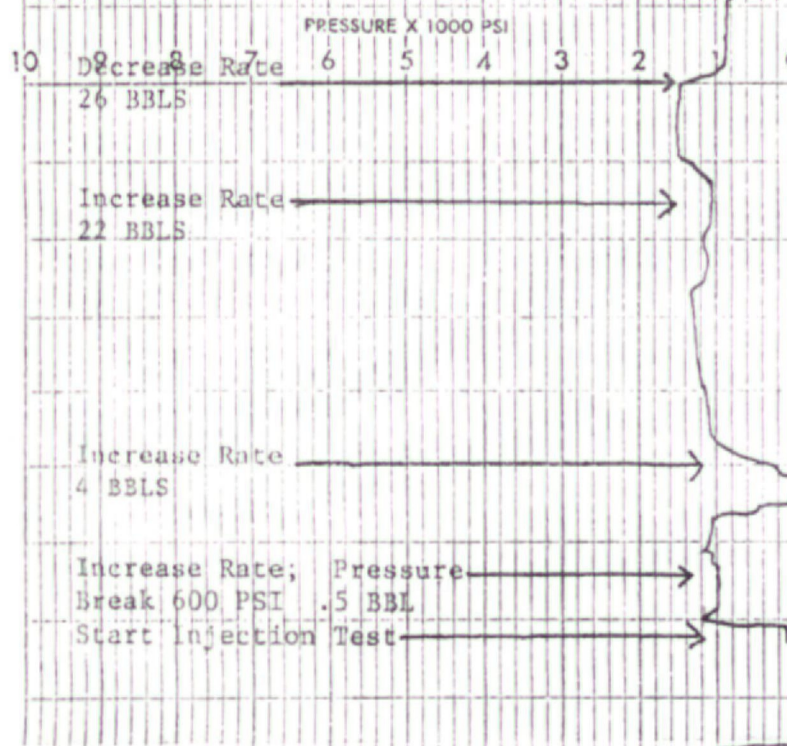
Customer Representative Gene Mullholland
Western Representative Ed Schleinger
Distribution 1 copy: 717 17th St., Suite 1770
Denver, CO 80202

1 copy: Sidney District

Job Number

697212





WESTONMETER MODEL "C"

11:00

FORT WORTH, TEXAS

WESTON CO.

PRESSURE X 1000 PSI

FLOW RATE bbls./min.

0-10 BPM Scale

10.40

Annulus Full: Start Circulation to
Pit 8 BBLs
Start Water Down Annulus

PRESSURE X 1000 PSI

FLOW RATE bbls./min.

0-10 BPM Scale

Test Line

Increase Rate
4 BBLS

Increase Rate; Pressure
Break 600 PSI .5 BBL

Start Injection Test

WESTON
FORT WORTH, TEXAS
WESTON CO.

PRESSURE X 1000 PSI

FLOW RATE bbls./min.

0-10 BPM Scale

TIME LAPSE

PRESSURE X 1000 PSI

FLOW RATE bbls./min.

0-10 BPM Scale

Shut Down
73.5 BBLS

Resume Down Annulus
70 BBLS

11:20

PRESSURE X 1000 PSI

FLOW RATE bbls./min.

0-10 BPM Scale

Shut Down 70 BBLS

WESTON CO. I.R.
FORT WORTH, TEXAS

11:00

WESTON METER MODEL "C"

